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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,941	01/04/2002	Wendell B. Colson	4686/00004	4413

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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/869,941

Applicant(s)

COLSON ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 158-199 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 158-199 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. The Amendment submitted on April 19, 2004, has been entered. Claims 1 – 157 have been cancelled. Claims 158 – 199 have been added. Therefore, the pending claims are 158 – 199.

2. The cancellation of claims 1 – 157 renders moot the rejections to those claims set forth in the previous rejections. However, similar rejections to the newly added claims will be made below.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 158, 169, 178, 179, and 193 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 59 of copending Application No. 10/088,576. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in both applications are drawn to the same finished product, i.e., a nonwoven fabric with parallel yarns running in the warp and weft directions which are adhesively bonded together.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. The Applicant argues that the present claims do not read on the laminated nonwoven fabric claimed in application 10/088,576 because the present claim does not recite a “laminated” fabric and it does not require that the fabric is formed by a pressure lamination apparatus”. However, this is not persuasive since the claims in the present invention do not exclude nonwoven fabrics which are produced by lamination. Further, the type of apparatus and method of making the product are only given patentable weight to the extent that they produce a structural limitations. In this case, the limitations that the fabric is laminated and produced on a pressure lamination apparatus do not produce a structurally different product then the one being claimed in the present application. Therefore, the final product produced in both applications can have the same structure and thus both sets of claims are drawn to the same scope.

6. Claims 158 – 199 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9 – 16 of copending Application No. 10/088,613. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in both applications are drawn to the same finished product, i.e., a nonwoven fabric with parallel yarns running in the warp and weft directions which are adhesively bonded together.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

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7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 158 – 160, 164 – 166, 169 – 173, 178 – 180, 186, 187, 188, and 192 – 199 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartstein (3,591,434).

The features of Hartstein have been set forth in the previous Office Action. The newly added claims are drawn to a nonwoven fabric with a first set of parallel yarns, a second set of parallel yarns, wherein the first set of yarns are perpendicular to the second set of yarns and are bonded together by an adhesive layer between the two sets of yarns. Therefore, claims 158 – 160, 164 – 166, 169 – 173, 178 – 180, 186, 187, 188, 192, and 193 are anticipated by Hartstein for the reasons of record. It is noted that claim 170, which is drawn to the method of applying the adhesive layer is only given patentable weight based on the structure produced by the method. In this case the method will produce a product with a layer of adhesive between the two sets of yarns. Since Hartstein discloses a nonwoven fabric with those structural limitations, the claim is anticipated by Hartstein. Hartstein discloses that the two sets of yarns can be made from the same materials, or the yarns can be different materials to modify the properties of the laminate (column 4, lines 20 – 30). Therefore, claims 195 – 199 are anticipated. Further, since Hartstein teaches using the same type of yarns in both the first set of yarns and the second set of yarns, the strength of the yarns in the warp direction will inherently be the same as the strength of the yarns in the weft direction since the yarns themselves are identical. Therefore, claim 194 is anticipated by Hartstein.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 161 – 163, 174 – 177, and 181 – 185 are rejected under 35 U.S.C. 103(a) as obvious over Hartstein.

As set forth in section 16 of the previous Office Action, optimize the size and amount of the adhesive used between the sets of yarns and the spacing or density of the yarns themselves would be obvious to one of ordinary skill in the art. Therefore, claims 161, 176, 177, 181, 182, and 183 are rejected.

Also, it would have been obvious to one of ordinary skill in the art to optimize the weight of the first yarns to produce a fabric with good strength properties that is lightweight and can be used in various end use applications. Therefore, claims 162 and 163 are rejected.

Further, Hartstein discloses that the fabric can be used for various end products which would require different levels of coverage as well as having different strength and reinforcement requirements. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed denier or yarn size, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill in the art would optimize the yarn size to produce a reinforcement fabric with good strength properties and stability properties in both the warp and weft direction based on the desired use of the laminated material. Therefore, claims 184 and 185 are rejected.

Finally, it would have been obvious to one having ordinary skill in the art to choose the claimed adhesive materials to use as the adhesive layer between the two sets of yarns, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. One of ordinary skill in the art would be motivated to choose materials which can easily be placed between the two sets of yarns, so that the adhesive material will produce a strong bond between the two yarns without using too much adhesive material that the laminate becomes too stiff or heavy and loses the feel of a textile material. Thus, claims 174 and 175 are rejected.

11. Claims 168, 190, and 191 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartstein in view of Pittman.

Claims 168, 190, and 191 are rejected for the reasons set forth in section 17 of the previous Office Action.

12. Claims 167 and 189 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartstein.

Claims 167 and 189 are rejected for the reasons set forth in section 19 of the previous Office Action.

### ***Response to Arguments***

13. Applicant's arguments filed April 19, 2004 have been fully considered but they are not persuasive. The Applicant argues that the fabric produced by Hartstein does not read on the claimed fabric because the yarns are pressed into the soft film layer with relatively high pressure which would embed the yarns into the film layer and cause the adhesive layer to be on both sides of the yarns and not just between the two yarns sets (response, page 10). While it is true that

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pressing the yarns into the film could embed the yarns in the film layer, Hartstein does not teach embedding the fibers into the film. First it is noted that Hartstein's purpose is to produce a laminated fabric. If the yarns were embedded into the film as the applicant suggests then the laminate would not have a fabric feel or appearance, but instead would be a reinforced film. Further, Hartstein discloses that the film layer is one-half to one mil thick. Therefore, the yarns would have to have a diameter smaller than one-quarter of a mil for both sets of yarns to be embedded in the film. Finally, the figures which Hartstein provides to visually describe the desired product clearly show the yarns as separate layers with the film layer lying between the two yarn sets. The yarns are not surrounded by or embedded into the film layer. Thus, while it is true that fibers could be embedded in the film layer, one of ordinary skill in the art would read the disclosure as a whole and realize that Hartstein is producing a laminated product with the yarns lying on the outside of the laminate and not embedded in the film layer. Therefore, one of ordinary skill in the art would know to control the temperature, pressure or nip size to prevent the yarns from being completely embedded in the film layer. Therefore, the rejection is maintained.

14. The Applicant also argues that Hartstein would not teach using 5 – 25% by weight of adhesive since the figure shows that the film layer has the same thickness of the yarn layers. First, it is noted that while the picture maybe a visually representation of what the laminate should look like the figure is not required to be to scale, so therefore things such as thicknesses or weight amounts cannot be derived from a picture alone. Second it is noted that the rejection for the claims reciting the amount of adhesive as a limitation, is a 103 rejection based on obviousness and not a straight anticipation rejection. Thus, while one of ordinary skill in the art would use the figures in the patent to get an approximate idea of what the final product would



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look like, the figures would not be interpreted as being exact replicas. Further, even if the figure were to scale the rejection is based on the fact that it would be obvious to one of ordinary skill in the art to modify the invention taught by Hartstein and no where does the rejection argue that Hartstein discloses the claimed amounts explicitly. Finally, it is noted that Hartstein does in fact teach using a film layer which has a similar thickness as the adhesive layer taught by applicant. Therefore, one can presume that while Hartstein might not have the exact same proportions as the applicant's product it wouldn't be drastically different from the applicant's invention and in fact it would be obvious to optimize the product taught by Hartstein to control the total amount of adhesive in the final product. Therefore, the rejection is maintained.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

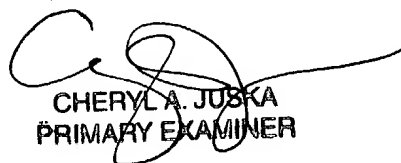
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo  
June 24, 2004



CHERYL A. JUSKA  
PRIMARY EXAMINER